

### TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION JACKSON ENVIRONMENTAL FIELD OFFICE

1625 HOLLYWOOD DRIVE JACKSON, TENNESSEE 38305-4316 PHONE (731) 512-1300 STATEWIDE 1-888-891-8332 FAX (731) 661-6283

March 19, 2015

The Honorable John Holden, Mayor City of Dyersburg 435 Highway 51 By-Pass South P.O. Box 1358 Dyersburg, Tennessee 38025-1358

REF: City of Dyersburg, Audit

Phase II Municipal Separate Storm Sewer System (MS4)

Permit No.: TNS075264

**Dyer County** 

Dear Mayor Holden,

On Tuesday, February 24<sup>th</sup>, 25<sup>th</sup>, and 26<sup>th</sup>, of 2015, I met with your Stormwater Manager, Scott Ball and your City Engineer, Justin Avent (contracted through Smith Seckman Reid, Inc, commonly referred to as SSR consulting engineering firm) for the purpose of conducting a MS4 Audit of Dyersburg's permitted stormwater program. On Tuesday I had Amy Fritz accompanying me from my office and then on Wednesday, I had Dan Hatch. The audit's purpose is to determine the City of Dyersburg's compliance status when compared to the requirements of the 2010 MS4 permit and if needed, work with the municipality to develop a process of compliance in noted areas of deficiencies.

Before I get involved in the details of the inspection, please allow me to express my appreciation for Dyersburg's responsiveness to inquiries from personnel of the Jackson Environmental Field Office (Division of Water Resources) when MS4 issues are passed along to your MS4 representatives. This attempt at a compliment is equally true when it comes to dealing with Construction General Permit (CGP) issues within your MS4 area that develop from time-to-time. These efforts by you staff are certainly appreciated by this state MS4 inspector.

#### A BRIEF HISTORY/ BACKGROUND OF THE MS4 PERMIT

Over the past 30 years, the Environmental Protection Agency (EPA) and the state water quality agencies have realized the great impact that rain water runoff has on surface waters-streams, rivers, lakes, estuary and ocean waters. Rain water falling on industries, urban areas and construction activities can become contaminated with sediments, suspended solids, nutrients such as phosphorous and nitrogen, metals, pesticides, organic material and floating trash. These pollutants are then carried into surface waters. Unlike sanitary wastewater and industrial wastewater, most stormwater is not treated prior to entering streams. Therefore, it becomes imperative that stormwater runoff within urbanized areas be managed so that pollutants are minimized or eliminated from entering surface waters. The Municipal Separate Storm Sewer System (MS4) permit is a type of permit administered by the Tennessee Department of Environment and Conservation (TDEC), the Division of Water Resources (DWR) to reduce the amount of pollutants in stormwater runoff from appropriate jurisdictions.

This MS4 Audit is a requirement of the DWR by EPA.

#### **GENERAL OVERVIEW OF THE INSPECTION**

As was stated in the introductory portion of the Audit, Dyersburg (or City) has been exceptional in being responsive to any MS4 issue that has developed within Dyersburg's MS4 jurisdiction. This is one thing that was known prior to the Audit and confirmed again during the Audit.

Unfortunately, Dyersburg has not developed the required Stormwater Management Plan (SWMP) as required by the MS4 Permit. It was amazing, however, to see how much of the SWMP was being accomplished by the City's Stormwater Ordinance. One standout requirement has to do with the ½" run-off reduction required on new development. That has been a Dyersburg requirement for years prior to the new "Permanent BMP" ordnance requirement. The new required implementation date for the "Permanent BMP" ordanance should be on or about February 12, 2016.

#### Summary & Impressions of Dyersburg's MS4 Program

Based on the before mentioned responsiveness, this state auditor was surprised that Dyersburg did not have the MS4 Permit required Stormwater Management Plan (SWMP). The audit, however, revealed the quality and effectiveness of the Dyersburg's stormwater ordinances. It also revealed that Dyersburg's City Engineer, Justin Avent and Stormwater Manger, Scott Ball understands the intent and purpose of the MS4 program, have embraced it and implemented even without a formal SWMP.

Scott Ball's efforts related to training, educating, and promoting stormwater pollution and prevention is commendable.

#### Recommendations, Requirements, and Required Reponses(s)

(This listing is based on the details of the audit and should be the main MS4's Focus)

1. Develop the required Stormwater Management Plan (SWMP) for the City of Dyersburg, Tennessee in accordance with the City's MS4 Permit TNSO75264. It is acknowledged that Dyersburg's current stormwater ordinances allow the City to operate effectively as an MS4 program without the formal structure of the a SWMP. Once you complete the SWMP, however, you will address most of the compliance issues with the permit. (4.1)

On page 15 of the Audit Questionaire that you have, you will find an excellent list of all of the needed items of a SWMP. The development of the SWMP will address all of the details of the permit that are not currently being accomplished.

We mutually agreed that the City will complete and submit Dyersburg's SWMP to my attention at the Jackson Environmental Field Office on or before <u>Tuesday</u>, <u>September 15</u>, <u>2015</u>.

- 2. Until Dyersburg has fully developed a written "Stormwater Management Plan" and implemented the plan, the State of Tennessee's Division of Water Resources cannot declare the City in full compliance with the permit.
- 3. Dyersburg must prepare and incorporate the "Permanent Stormwater Management" requirements into their City's stormwater ordinance. This must be accomplished on or before, February 12, 2016.
- 4. Make sure the entire MS4 permit's requirements of analytical sampling, visual stream surveys, habitat alteration evaluation; pathogen sampling is completed before the end of the 5 year permit cycle (September 30, 2015). (5.2)
- 5. Follow through with the full implementation of the "MYGOV" tracking systems. It was agreed that I would be contaced once your personnel was comfortable with the new system for the purpose of a return visit and a demonstration of the system. (I'm looking forward to that demonstration.)
- 6. Be sure to develop a way to track all public information that is circulated to the general public so the City can get full credit for your effort.
- 7. Double check you list of known "Hot Spots". As was discussed, the City should also take into consideration to adding automobile maintenance shops, body repair shops, lawn services, and other similar facilities to the list along with any pest control type businesses.
- 8. Be sure to submit your 2015 Annual Report by the end of this September to my attention at the Jackson Environmental Field Office at 1625 Hollywood Drive, Jackson, Tennessee, 38305. This is considered a "Hard Deadline" and could be enforced upon should non or late submittal become a pattern.

- 9. It is recommended that the City consider using water/ sewer bill inserts to promote stormwater management along with possible ads in the State Gazette.
- 10. Develop a written version of your current (very effective), Illicit Discharge Detection and Elimination Plan (IDDE) as required by the MS4 Permit. Though not in written form, the City's current plan is excellent. (The plan is described in detail under Control Measure III below)
- 11. Dyersburg currently allows a 30' buffer calculated on an average. In the section 4.2.5.1 of the MS4 Permit it is stated that the 30' buffer is a minimum distance, not an average as is currently allowed. This will need to change when you refine your stormwater ordinance.
- 12. Based on the stormwater inspection of the equipment area of your public works facility, the City must develop a Stormwater Pollution Prevention and Prevention Plan SWPPP) for that site. Please see the Municipal Ispection section near the end of this document, page 12.

#### The Audit details begin on page 5 of this letter.

The courtesy and cooperation shown to us during this inspection was greatly appreciated. If you have any questions concerning this letter and enclosed detailed report, or if there is any other issue that you think I might be able to assist you with, feel free to call me at 731.512.1362 or by Email at James.W.Scott@tn.gov.

Sincerely,

James W. Scott

Jackson Environmental Field Office 1625 Hollywood Drive Jackson, Tennessee 38305

CC

WaterLog

Scott Ball, MS4 Program Manager City of Dyersburg 435 Highway 51 By-Pass South P.O. Box 1358 Dyersburg, Tennessee 38025-1358

Justin Avent, P.E., City Engineer City of Dyersburg 435 Highway 51 By-Pass South P.O. Box 1358 Dyersburg, Tennessee 38025-1358

#### **THE AUDIT DETAILS (Based on MS4 Questionnaire)**

#### 1. Minimum Control Measure I - Public Education & Outreach (Section 4.2.1)

- Dyersburg has not developed the required SWMP as of the date of this audit as required by Section (4.1) of the MS4 Permit.
- Dyersburg does, however, educate the public through promotions at the Masters Gardener's Club, County/ City Fair (promotional backpack, water bottle, drink insulator, etc.), Morning Rotary Club, Noon Rotary Club, Earth Day at schools, and High School visits. No official records are kept.
- The City has developed a list of "hot spots" which currently consists mainly of the major industries, the industrial parks and the railroads. The hot spots are formally inspected once per year which includes contacting the facility's personnel making sure that the industry does their part to minimize stormwater runoff pollution.
- The City currently has no written Public Information and Education Plan (PIE) even though they maintain such activities. Dyersburg has an active on-going program that keeps the general public's awareness of the impacts of stormwater runoff on water quality. In addition, water quality communication is kept open between the City and engineering consultants, developers and construction companies, local as well as from outside the Dyersburg community.
- The area that currently has not been addressed is auto maintenance shops and professional chemical applicators for residential and agriculture.

#### 2. Minimum Control Measure II – Public Involvement/Participation (4.2.2)

- Dyersburg has not developed the required SWMP as of the date of this audit as required by Section (4.1) of the MS4 Permit.
- Your stormwater program is maintained on the City's website <a href="http://dyersburg.gov/">http://dyersburg.gov/</a>. From the home page one has to go to "Departments" and scroll down to find the stormwater section. Once you are there, the web page has Scott Ball's contact information available.
- To encourage the general public to report illegal spillage, dumping or illicit disposals, essentially all City owned vehicles have a 311 (non-emergency) call number on them for that purpose. The larger vehicles have advertising that promotes stormwater management and the benefits. The 311 number is also found in the local "State Gazette" newspaper, on their website, and on some City owned buildings.
- It was recommended that the City consider using water/ sewer bill inserts to promote stormwater management along with possible ads in the State Gazette.

• At this point in time, Dyersburg has not formally tracked such promotional activities. It has been mostly dependent on their normal yearly schedule of events.

### 3. Minimum Control Measure III – Illicit Discharge Detection & Elimination (IDDE) (4.2.3)

- Dyersburg has not developed the required SWMP as of the date of this audit as required by Section (4.1) of the MS4 Permit.
- Section 8 of Dyersburg's Stormwater Ordinance, the City has the authority to prohibit "non-stormwater" discharges into their stormwater sewer system.
- The City has developed an intricate network to monitor for illicit discharges (ID). Their monitoring network was developed through training and coordination with the public works department, the wastewater collection system personnel, the local code enforcement group, the water system meter readers, the street sweeper company, and the police and fire departments. An example would be that solid waste collection is done every week. The workers are at every potential pollution site every week. The police are patrolling 24/7. So it could be said that Dyersburg is under constant monitoring for illicit discharges due mainly to the training and coordination efforts Dyersburg's Stormwater Manager.
- Dyersburg has developed a first class GIS mapping system for all of their utilities and currently have 90% of their underground separate stormwater sewer system mapped. The up and running system contains all needed details such as all inlets, manholes, type of pipe, elevations, flow directions, outfalls, and the list goes on. An excellent system! All City employees that need access have access to this system.
- The City has an active and very effective Illicit Discharge Detection and Elimination (IDDE) program, but the program has not been formalized in writing at this point in time. The MS4 permit requires a written plan.
- As of the day of this audit, the City does not have a written Enforcement Response Plan (ERP) as specified by their MS4 Permit. They do, however have a very specific enforcement response procedure in their City's stormwater ordinance.
- Dry weather field screenings are conducted under their dailey program by utilizing all of the other City manpower as mentioned in 3<sup>rd</sup> paragraph of this section. Even though the City does not have a written program, critical personnel is made aware of any MS4 issues that develop. No chronic and/or significant offenders have been noted during 2010 to 2015 permit cycle. Formally planned screenings are conducted by the City's Stormwater Manager and/or City Engineer on a quarterly basis. The documentation is tracked manually. No evidence of the inspection is noted if no issues exist at the time of the inspection, therefore deserved credit is unable to be given by the state.

- When the City receives a call related to an illicit discharge, Dyersburg personnel makes a physical visit with at least two people and they take water samples if needed.
- Dyersburg's ordinance requires complaints to be investigated within 24 hours.
- The City's fire department is typically the first ones on site and they report if there is any MS4 concerns. This is another example of the interaction with other departments to enhance their MS4 program. The fire department takes the lead if any substance has been discharge and works closely with MS4 representatives. It merits mentioning that fire department personnel are exposed to annual MS4 training. There is no written program, but the response process performs very well when it has to be executed.
- The enforcement mechanisms available to Dyersburg through their ordinance is verbal warnings, written notices, citations w/ administrative penalties, stop work orders, withholding of plans or other authorizations if needed. The enforcement plan is specified in Section 9 of the Dyersburg Ordinance.
- There has been no enforcement action above a verbal warning needed since the permit came into effect in 2010.

### 4. Minimum Control Measure IV – Construction Site Stormwater Runoff Control (4.2.4)

- Dyersburg has not developed the required SWMP as of the date of this audit as required by Section (4.1) of the MS4 Permit.
- As required, Dyersburg is using the most current edition of 2002 version of the Erosion Prevention and Soil Control (EPSC) which is the most current to date. The 2002, Second Edition of the EPSC is referenced in section 5, subpart 5.1.1 of their 2004 ordinance.
- Section 4.2.4.c (dealing with impaired or exceptional waters) of the permit is addressed in their current ordinance.
- Section 4.2.4.d of the permit will be satisfied with the full implementation of their "MYGOV" network. This system has been implemented and is currently being used/tested by code enforcement personnel and stormwater will be added in the very near future.
- Section 4.2.4.e of the permit is currently addressed through your project design review and approval process. The City reviewed 12 to 15 development plans during the last 12 month reporting period.
- Section 4.2.4.f of the permit is accomplished through your subdivision regulations.
- To obtain public input to potential projects as required by section 4.2.4.g of the permit, the projects are made known through the Planning Commission's public notice process.

- Section 4.2.4.h of the MS4 Permit, which requires there to be a procedure for site inspections and enforcement control measures, is accomplished through their stormwater ordinance.
- Even though you do not currently have a written Enforcement Response Plan, the City's ordinance allows Dyersburg to implement enforcement if it should become necessary.
- Dyersburg currently has four individuals with a Level I TNESPC certification but no one is Level II certified at this time. The Level I certified employees are Scott Ball, Justin Avent, Kevin Joshlin and Thomas Mullins. At a minimum your City Engineer, Justin Avent will obtain his Level II certification this year which will be required for plans review under the 2015 MS4 permit scheduled to become effective in September of 2015.
- Section 4.2.4.j section of the permit related to monthly inspections is exceeded, but is only formally documented once per month meeting the permit requirements. The standardized inspection form requirement will be accomplished when the "MYGOV" system is implemented in the MS4 program functions.
- As of the day of this audit, Dyersburg had four (4) active MS4 permits with one of the four requiring monthly inspections.
- There were no significant MS4 violators identified over the previous 12 months. If there had been and enforcement action required, the enforcement action (per ordinance) can only be initiated by Scott Ball (MS4 Manager) or Justin Avent (City Engineer).
- Related to the enforcement procedure requirements of Section 4.5.1, the City's ordinance defines what enforcement can be done, but does not define how or what is to be done and when.
- When citizens complain, the complaint is investigated within 24 hours, remediated if required and the complainant is called back to inform them of what was found and what actions were taken if action was required.
- 5. Minimum Control Measure V Permanent Stormwater Management in New Development And Redevelopment (4.2.5)
  - Dyersburg has not developed the required SWMP as of the date of this audit as required by Section (4.1) of the MS4 Permit.
  - Post construction run-off is addressed during the planning and plans review stage, as well as, during final inspection to close-out the project. To meet the requirement of Section 4.2.5.1 of the MS4 for Dyersburg, Section 10 of their stormwater ordinance grants you MS4 program the authority to implement the needed post construction requirements.

Section 10 of the City's Stormwater Ordinance allows for monetary fines to be assessed against the developer for noncompliance to the post construction stormwater run-off performance.

Dyersburg currently allows a 30' buffer calculated on an average. In the section 4.2.5.1 of the MS4 Permit it is stated that the 30' buffer is a minimum distance, not an average as is currently allowed. Section 4.2.5.2.1 of the permit specifies implementing BMP's that will infiltrate, evapotranspire, harvest or use, at a minimum, 100% of the first inch of every rainfall event preceded by 72 hours of no precipitation. It was a pleasant surprise that the City already requires a ½" of the first inch capture by way of your ordinance.

- One of the flexibilities of the MS4 permit is that it allows a couple of options for a development that cannot meet the 100% goal of not allowing the first inch of rainfall to run-off. These options are Off-Site Mitigation or a Public Stormwater Project Fund. As of this audit, Dyersburg has no such program and more than likely, will not make either option available to a development. Dyersburg does not offer, nor do they plan to offer an incentive program for redeveloped sites.
- Dyersburg's MS4 Program has not submitted an EPA Scorecard. The EPA Scorecard is required to be submitted within 12 months of the effective date of the Notice of coverage. (Section 4.2.5.3 of the permit) It should be noted that Scott Ball, your stormwater Program Manager has only been the official stormwater program manager for two years (equates to 2012/2013). In addition, since we are so close to the 2015 issuance of the MS4 Permit, this inspector will allow Dyersburg to put-off completion of the 2010 EPA Scorecard and focus on completing the 2015 EPA Scorecard since the new permit issuance will be in September of this year.
- Dyersburg requested the one year extension on the Permanent Stormwater Management requirements. Your existing stormwater ordinance almost meets the new requirement. As you review the current ordinance with the "Model Ordinance" you may find that your current ordinance may need only minor refinements.
- Your staff is to be commended for having monthly meetings with Code Enforcement, the City Planner, Public Works, Fire Department, etc. to include all interested parties in reviewing site plans and potential planned projects and developments related to MS4 issues.
- The insurance that each development meets their performance standards is addressed in Section 6.5 of the City's stormwater ordinance.
- Post construction accountability is assured through City Ordinance Section 6.1 which
  requires as-built drawings. In addition, your City Engineer reviews the details to make
  sure it was built to meet or exceed expectations related to MS4 requirements.
- Dyersburg references TDEC's ESPC Manual as their post construction design manual.

- At this point in time, Dyersburg does not require operators at permitted sites to develop and implement a maintenance agreement accepting maintenance responsibility for a site which would include inspections and a means to transfer this agreement should another developer decide to purchase the development. (4.2.5.5, 4.2.5.5.1)
  - Section 6.5 of the City's ordinance does, however, provide the City with a regulatory mechanism to insure long-term operation and maintenance of BMP's.
- City Ordinance 9.2.4 ensures enforceable compliance within 30 days of issuing a non-compliance notification. If the City has to conduct the work, ordinance 6.5 allows them to re-coop the City's costs. (4.2.5.5)
- Once your "MYGOV" system is implemented into the stormwater program, Dyersburg should be in compliance with section (4.2.5.6) of your MS4 Permit and section (4.2.5.6.a., b., c., d.).
- Dyersburg Stormwater Ordinance 6.5 addresses the requirements found in sections 4.2.5.7.a & .b, but not to the degree of what the new permanent BMP requirements will entail when adopted.
- 6. Minimum Control Measure VI Pollution Prevention/Good Housekeeping for Municipal Operations (4.2.6)
  - Dyersburg has not developed the required SWMP as of the date of this audit as required by Section (4.1) of the MS4 Permit.
  - The City has not, to date, targeted City facilities with the same scrutiny as development unless construction is involved. Parks of all types, however are maintain very well. All City equipment is serviced inside in a garage. In addition, all City construction equipment is keep under roof.
  - Each department, natural gas, sewer, water, wastewater, drainage, maintenance, etc. are responsible to make sure they are MS4 compliant. Each department answers to your Stormwater Program Manager, Scott Ball.
  - All MS4 related maintenance is completed with City resources. This allows these employees to undergo MS4 annual training therefore they know how to properly deal with implementation of needed BMP's and to properly handle construction stormwater runoff. Inspection and cleaning of stormwater infrastructure is a continuous process. Cleanings are taken to the Dyer County Landfill for disposal. (4.2.6)
- A street sweeper company is under contract and deploys his one unit street sweeper daily within Dyersburg's MS4 jurisdiction.
- Dyersburg currently has no "Integrated Pest Management Plan" (IPM).

• All flood management projects are reviewed by the City's Engineer, Justin Avent. MS4 concerns are addressed which ultimately deals with water quality. Dyersburg has just recently issued a contract to improve stormwater drainage along Main Street (approximately 1,600' of drainage pipe). This drainage improvement project should help with flooding in that area.

#### Reviewing and Updating Stormwater Management Program (4.4)

• Dyersburg has not developed the required SWMP as of the date of this audit as required by Section (4.1) of the MS4 Permit.

#### **Enforcement Response Plan (4.5)**

- As stated previously, even though the City does not, at this point in time, have a written Emergency Response Plan (ERP), you do have City Ordinance 6.5 which functions just as well as the intended purpose of the written ERP of the SWMP.
- The case documentation as specified in part section 4.5.3 of the MS4 permit, will be implemented within 6 months of this audit.
- Since their 2010 NOC of the MS4 permit, Dyersburg has not had any chronic violators to document. Once MYGOV becomes operational and used by MS4 personnel, the ability to track a MS4 issue and chronic violators will be established.

#### **Analytical Monitoring (5.1)**

- Dyersburg has not developed the required SWMP as of the date of this audit as required by Section (4.1) of the MS4 Permit.
- The City has committed to perform each of the analytical and pathogen sampling requirements of Dyersburg's MS4 permit prior to the new permit being issued in September, 2015. This will satisfy the sampling requirements of the permit.
- You are to be complemented for conducting pathogen sampling (ecoli) on an annual bases exceeding the permit's requirement of one time during the 5 year permit cycle.

#### Non-analytical monitoring (5.2)

• Dyersburg does not have an active program to fulfill this section of their permit, but will seek a contractor to meet the requirements and the deadline established in the permit.

#### Recordkeeping (5.3)

• As required records, analytical, reports, and all data related to your NOI are maintained for the required 3 years

- The City makes their Annual Report available for public comment by advertising it on the City's website, the State Gazette (local newspaper), and through a smartphone app called DGOV (specific to Dyersburg).
- Dyersburg did submit the required MS4 Annual Report, but unfortunately, the September 30<sup>th</sup> deadline was not met.

#### **Audit- Construction Inspections**

We visited four major construction sites. Two of the sites still had a fair amount of construction work pending and the other two sites were down to a small punch list. Dot Foods still has to return the industrial park's retention pond back into it original condition and some minor work on their actual facility site.

Dyersburg's new industrial park water tank still lacked the installation of the booster pump system and tying the tank into the distribution network. The new bank and funeral home that we visited were definitely down to a minor punch-list.

All projects appeared to have been well monitored by your MS4 personnel and the finished projects now add to the attractiveness of Dyersburg to those that might visit or relocate to you fine City.

#### **Audit- Municipal Inspection**

The Public Works facility was inspected from a stormwater perspective and the following observations were made:

- No Stormwater Pollution Prevention Plan (SWPPP) has been developed for the facility. After inspecting the site, a SWPPP is definitely needed to address a few areas of concern that will be listed. The SWPPP is also justified by the fact that their are multiple departments responsible for stormwater controls adding to the need for there to be a common document that each department can use to help insure consistant clean-up and controls across the spectrum of departments.
- There were several blue plastic drums located to the left of the maintenance shop and across the drainage that flows behind the shop, The drums were found to have mosquito spray in them and a pump in one of the barrels. They were stored outside, adjacent to the drainage way and exposed to any rainfall with no secondary containment. (Note Picture No. 1)
- There was a concrete area next to the maintenance garage building that is used for equipment washing. There is a drain inlet located at the center of the slab that collects the wash water and discharges to a oil—water separator and grit chamber and ultimately into a pipe connected to the wastewater plant near by. There is, however, a path for water to run-off into the drainage way behind the maintenance garage. Even though the run-off is unlikely, some protection should be considered to prevent any

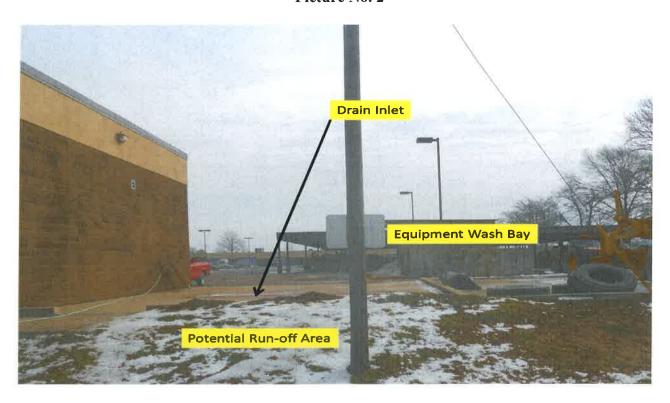
wash water run-off, as well as, a stormwater event of a magnitude that could cause the washing of any oil & grease, cleaning solution, anti-freeze, salt residue, etc. into the adjacent drainage way. (Note Picture No. 2)

- There was another blue drum noted at the north east corner of the fence along with a yellow commercial grade mop bucket. The road side ditch lyes between the fence and the south edge of pavement of Honeydew Lane. This drum contained a cleaning solution for the cleaning of the Public Works' office complex. Apparently this is the area where the cleaning of the cleaning equipment takes place and the re-filling of the mop bucket with the cleaning concentrate. (See Picture No. 6)
- Even though there is room for run-off conern as noted above there was no visual evidence noted.

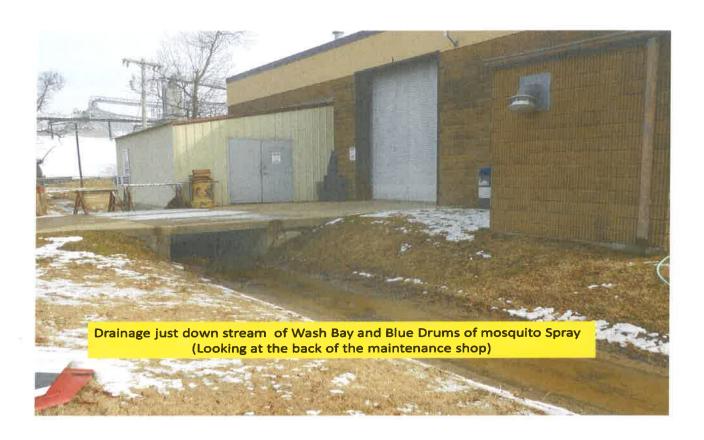
Picture No. 1



Picture No. 2



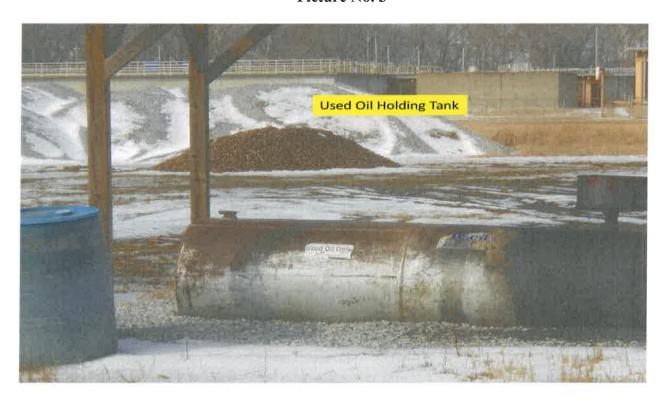
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#### Picture No. 4



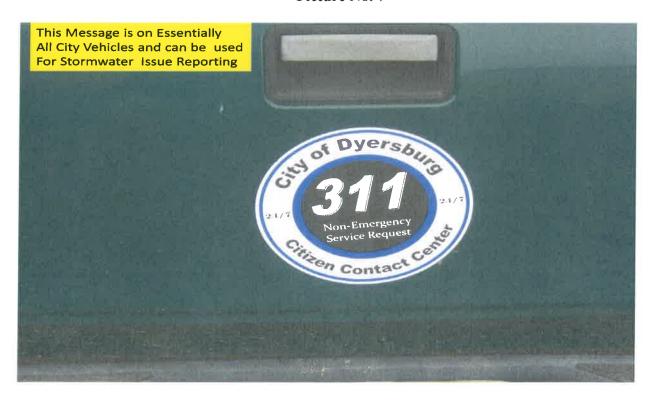
Picture No. 5



#### Picture No. 6



Picture No. 7



# STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF WATER RESOURCES

#### Small Municipal Separate Storm Sewer System (MS4) Audit Worksheet\* - Rev 1.2

MS4 Name: Dyersburg	Date: 02-24-2015				
County: Dyer	Permit #: TNS0 <b>75264</b>				
Responsible Official: Scott Ball, Program Manager	NOC Date: <b>05.13.2011</b>				
On-Site Representative(s): Justin Avant, SSR Consultants Phone Number(s):					
Name/Address/Title/Phone Number of MS4 Contact Person:					
Scott Ball/ 435 West Church Street, Dyersburg, 38024/ Program Manager/ 731.288.7696					

Y =Yes N= No (Circle one)

#### Stormwater Management Program (NPDES Permit Section 4.1.)

1. Y N Has a written Stormwater Management Plan (SWMP) been developed? (4.1.)

#### Minimum Control Measure #1: Public Education and Outreach (4.2.1)

- 2. Y N Has this program element been included in the SWMP? (4.2.1)
- 3. Y N Have they implemented a public education and outreach program? (4.2.1)

  SCHOOLS / EARTH DAY . ROTARY CLUBS . BOOTH @ FAIR (BACK. PACK W/ WATER
- 4. Y N Have they identified "hot spots" within their jurisdiction? (4.2.1)

  CONC. PLANTS; COLONIAL Rubbert FORMALLY ONE W A YEAR

  Loc

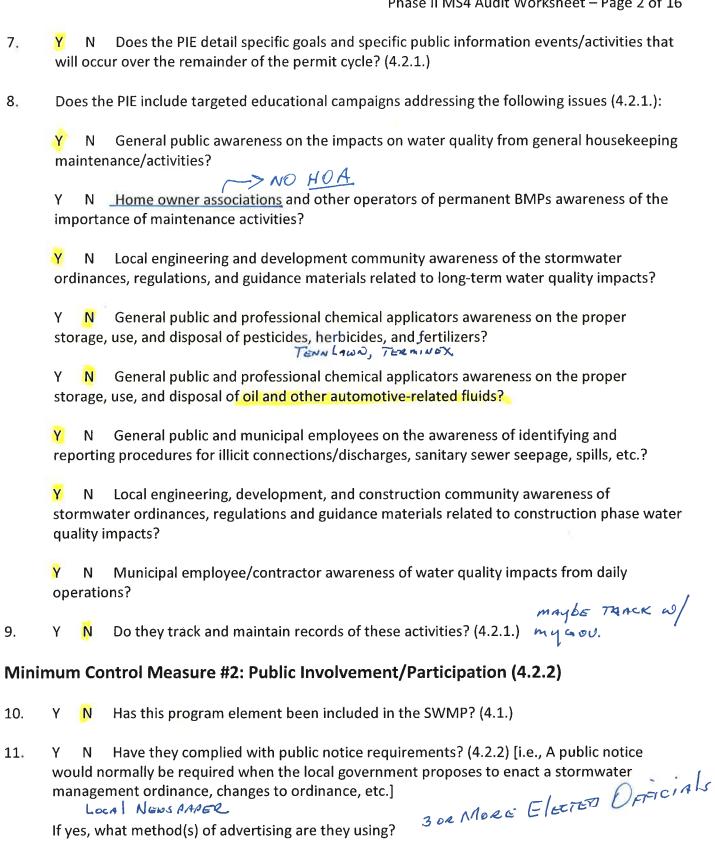
  RAIROAD

  If you list spot "is spot "ostivities focused on "hot spot" areas and the pollutant's) of songern

If yes, list specific events/activities focused on "hot spot" areas and the pollutant(s) of concern.

[Hot spot means an area where land use or activities generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater. Examples might include operations producing concrete or asphalt, auto repair shops, auto supply shops, large commercial parking areas and restaurants. (permit definition)]

- 5. Y N Have they developed a written Public Information and Education Plan (PIE)? (Due 12 months from NOC effective date) (4.2.1.)
- 6. Y N Has a method to evaluate the plan's effectiveness been incorporated into the PIE? (4.2.1.)



12. Have they identified and published the name of the stormwater contact?

Where is this information located?

If yes, what method(s) of advertising are they using?

13.	Y	N	lave they created a website devoted to their stormwater program	?
IJ.		1.4	lave they created a website devoted to their stormwater program	٠

Internet (Identify website): http://dycesburg.gov/ "unose Departments"
(NOT ON FIRST PASE)

- 14. How do they ensure public participation and involvement during the stormwater management program development process and/or during program changes? (i.e. stormwater advisory groups)

16. How was the annual report presented (i.e., public meeting, posted on the internet, etc.) (5.4.)

17. Y N Are stormwater related volunteer activities sponsored or endorsed by the MS4?

What participatory/stewardship activities (i.e. waterbody cleanups, storm drain stenciling, etc.) did they implement?

What is their method of advertising the public involvement opportunities?

(Due within 30 days of NOC effective date) (4.2.2)

(AZEITE

UTILIN BILL INSERT

18. Y N Have they tracked and maintained records of all public involvement/participation programs and activities? (4.2.2.) List how.

List the activities and number of the people that participated? (Including annual report meeting, cleanups, etc.)

## Minimum Control Measure #3: Illicit Discharge Detection and Elimination (IDDE) (4.2.3)

- 19. Y N Has this program element been included in the SWMP? (4.1.)
- 20. Y N Have they maintained, either through ordinances or other regulatory mechanisms, the ability to prohibit non-stormwater discharges into their storm sewer system? (4.2.3)
- 21. Y N Have they continued to develop and implement an illicit discharge detection and elimination program (IDDE) to detect and address non-stormwater discharges, including illegal dumping into their system? (4.2.3)

		Phase II MS4 Audit Worksheet – Page 4 of 16			
22.	Y N location	Have they continued to update, and develop a storm sewer system map showing the of all outfalls and the identification/name of receiving waters? (4.2.3)			
23.	Y N the gen	Does the map also include inputs into the storm sewer collection system and indicate eral direction of stormwater flow? (4.2.3.)			
	Who ca	n access the map and for what purpose?  CITY EMALOYEES			
24.	Y N	Have they developed written procedures for conducting the IDDE program? (4.2.3.)			
25.	Y <mark>N</mark> (Due 18	Has a written Enforcement Response Plan (ERP) for illicit discharges been developed? months from NOC effective date) (4.2.3.)			
26.	Y N (Due 18	Has the Enforcement Response Plan (ERP) been implemented? months from NOC effective date) (4.2.3.)			
27.	Y N	Is dry weather/field screening conducted? DAILY, BUT UND FFICIAL, USE OTHE			
28.	Y N Based on field screenings have they identified areas that have a reasonable potential of having illicit discharges? (4.2.3.)				
29.	What is	the frequency of their field screenings? Quality			
30.	Y N	Are investigations of illicit discharges documented? (4.2.3.)			
	Does th	e documentation contain:  Y N locations Y N sample results Y N times Y N discovered source Y N parameters			
31.	Y N stormw	Have they prohibited, by ordinance or other regulatory mechanism, contamination of ater from hot spots? (4.2.3) $S_{\text{CC}}$ .			
32.	Y N website	Is a mechanism currently available to the public to report illicit discharges (hotline, , other)? (4.2.3.)			

33. What are the illicit complaint investigation procedures?

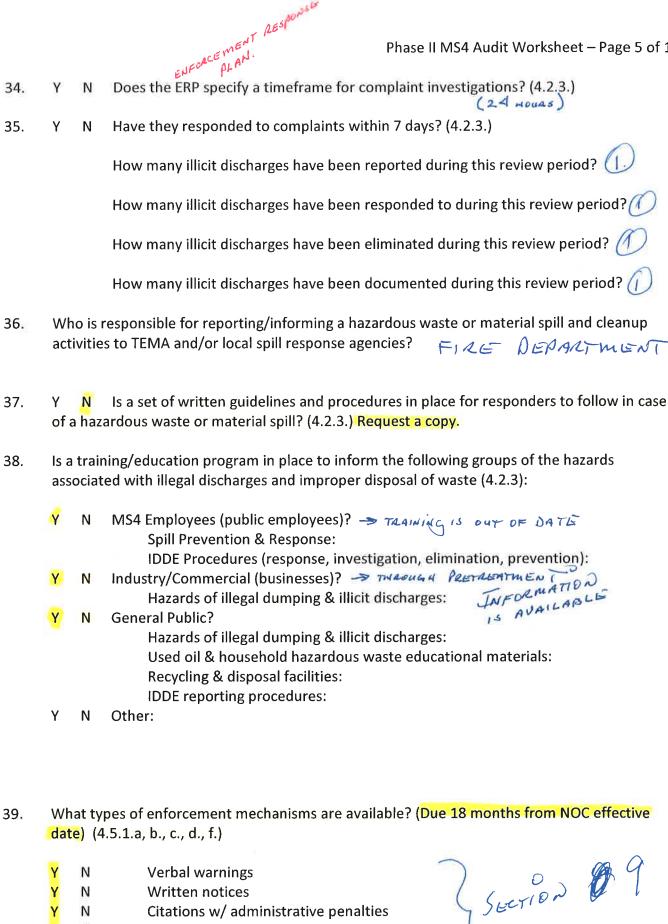
PHYSICAL VISIT

PERSON MINIMAL

SAMPLE CAPABIL

311, WEBSITE

What is that mechanism?



Citations w/ administrative penalties

Withholding of plans or other authorizations

Stop work orders

Additional measures (list)

N

N

N

40. Y N Have any enforcement actions been taken during this review period?

Describe:

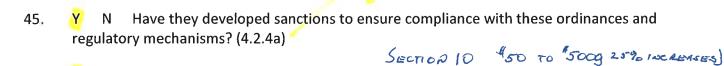
July Shark ORDINARCE SECTION 9

41. Y N Is there an official enforcement escalation plan or procedure in place? Request a copy. (4.5.1.)

#### Minimum Control Measure #4: Construction Site Stormwater Runoff Control (4.2.4)

- 42. Y N Has this program element been included in the SWMP? (4.1.)
- 43. Y N Have they continued to develop and implement a program to reduce pollutants in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre and/or less than one acre if that construction activity is part of a larger common plan of development? (Due 24 months from NOC effective date) (4.2.4)
- 44. Y N Have they updated ordinances or other regulatory mechanisms to include the current erosion prevention and sediment control (EPSC) measure requirements? What dates were these ordinances or regulatory mechanisms adopted? Date adopted: \_\_\_\_\_\_ (Due 18 months from NOC effective date) (4.2.4a)

Name and/or code section(s):



Y N Do the sanctions include monetary penalties as specified in TCA 68-221-1106? (4.2.4a)

- 46. Y N Are their EPSC requirements consistent with those described in the TDEC EPSC Handbook? (4.2.4b)
- 47. Y N Have they updated requirements in their program corresponding to the Tennessee Construction General Permit? Including special conditions for impaired and exceptional waters? (Due 18 months from NOC effective date) (4.2.4c)
- 48. Y N Have they developed an inventory and tracking mechanism for all active public and private construction sites that result in a land disturbance of greater than or equal to one acre and/or less than one acre if that construction activity is part of a larger common plan of development? (4.2.4d) What is the mechanism? Ask to see it.
- 49. Y N Have they developed requirements for construction site operators to control wastes such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality? (4.2.4e)

50.	Y	Ν	Have they developed procedures for site plan review, which incorporate consideration
	of	poter	ntial water quality impacts? (4.2.4f)

Are those procedures in writing? Request a copy.

- 51. Are these procedures included in the SWMP?
  - Does the procedures include an evaluation of plan completeness and over all BMP effectiveness? (4.2.4.f.)
- How many plans were reviewed during this reporting period? (12 ro 15) 52.
- 53. Does the plan review process ensure that EPSC measures meet state technical standards?
- 54. Have they developed procedures for receipt and consideration of information submitted by the public? List the procedures. (4.2.4g) PLANNING COMMISSION - Public
- 55. Have they developed procedures for site inspection and enforcement of control IN ORDINANCE measures? (4.2.4h)
- Are the enforcement steps included in their ERP? (4.2.4.h.) 56.
- 57. Have they required their inspectors to complete and maintain certification under the Tennessee Fundamentals of Erosion Prevention and Sediment Control, Level 1(or equivalent)? (4.2.4.i) List inspector names. Scott BAIL, KENIN JOSHLIN, JUSTIN AUGOT, THOMAS MUCLING
- 58. Have they required their site plan reviewers to complete and maintain certification under the Tennessee Erosion Prevention and Sediment Control Design Course, Level 2? (4.2.4i) List plan reviewer names.
- 59. Do they identify priority construction activity (a.k.a., sites)? (4.2.4.j) How? LOUB'S TANCK STOPS
- 60. Do they hold pre-construction meetings with construction site operators for priority construction activities? (4.2.4.j.)
- Do they perform inspections of priority construction sites at least once per month? 61. GO MORE, BUT DOC. AT LEAST 1/MD. (4.2.4.i.)
- Is a standardized inspection form used? (request a copy) working on one form used? (request a copy) working on one form used? (request a copy) working on one form used? The first out A form the most of the construction sites have active permits with the MS4? 62. 63. How many construction sites have active permits with the MS4?
- 64.

What is the number of active construction sites requiring monthly inspections? 1 - PRIORITY

65.	What is the number of inspections performed and the frequency over the past 12 months?			
66.	Request to see the procedures for tracking inspections. Describe the procedures.  Nor Current W			
67.	How many violations were found in the previous year?			
68.	What are the procedures if violations are found? Are the procedures documented in the ERP?  (4.5.1.)  ORDINANCE GIVES WHAT CHO BE DONE  NEED TO DEFINE WHAT WILL BE AONE			
69.	What is the procedure when citizen complaints are received? INDESTIGATE REMEDIATE CALL BACK			
70.	N Can construction site inspectors administer enforcement actions?			
	If no, who can? If yes, what types of enforcement actions?  Cimitized TO Scott / Justin			
71.	N Are enforcement actions tracked? Ask to see their tracking mechanism. Mygov.			
72.	Describe this tracking mechanism and person(s) responsible for follow up.			
(*)				
73.	How many of the following enforcement actions were used in the previous year?			
	Notices of Violations (NOV)			
	Administrative fines			
	Stop-work orders			
	Civil penalties			
	Criminal penalties			
74.	What is the most common compliance issue on construction projects (i.e. tracking on streets, litter or inadequate concrete washout BMPs)?			

## Minimum Control Measure #5: Permanent Stormwater Management in New Development and Redevelopment (4.2.5)

- 75. Y N Has this program element been included in the SWMP? (4.1.)
- 76. Y N Have they developed and implemented a program to address post-construction runoff from new development and redevelopment projects which disturb an acre or more or are part of a larger common plan? (4.2.5.1)
- 77. Y N Have they developed and implemented ordinances or other regulatory mechanisms to address post-construction runoff from new development and redevelopment projects? (4.2.5.1)
- 78. Y N Have they developed sanctions to ensure compliance with these ordinances and regulatory mechanisms? (4.2.5.1.)  $\leq \exp i \circ \rho$ 
  - Y N Do the sanctions include monetary penalties as specified in TCA 68-221-1106? (4.2.4a)
- 79. Y N Have they developed a set of requirements (performance standards) to establish, protect, and maintain water quality buffers in areas of new development and redevelopment? (4.2.5.1)
  - Y N In areas less than 1 mile<sup>2</sup> the buffer equals 30 feet
  - Y N In areas greater than 1 mile<sup>2</sup> the buffer equals 60 feet

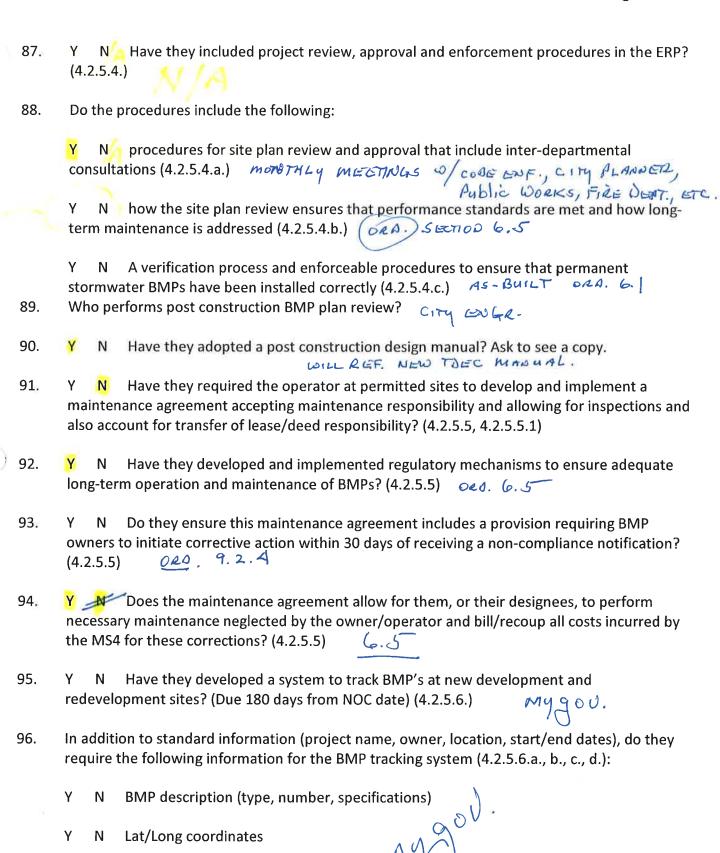
CAN DE LESS THAN 30' W/ AND OF 30'

#### Ask for a copy of set of requirements.

- 80. Y N Do site design standards require that BMP's be designed, built and maintained to infiltrate, evapotranspire, harvest, or use, at a minimum, 100% of the first inch of every rainfall event preceded by 72 hours of no precipitation? (4.2.5.2.1)
- 81. Do they allow Off-site Mitigation or Public Stormwater Project Fund for sites that cannot meet 100% of the runoff or pollutant reduction requirement?
- 82. Y N Do they offer an incentive program for redeveloped sites? (4.2.5.2.1)
- 83. Y N Have they filled out the EPA Water Quality Control Scorecard within the first year of coverage? (4.2.5.3.)
- 84. Y N Did they submit a copy of the scorecard with the subsequent annual report? (4.2.5.3.)
- 85. Y N Have any changes been made to local codes and ordinances? (4.2.5.3.)

What were the changes?

86. Y N Were the required updates to the ordinances performed within 4 years of coverage under this permit? (4.2.5.3.) List deadline date.



Y N Inspection information (date, findings, follow up activities, compliance status)

Ν

Maintenance requirements

97.	Y lea	N st an	Are they requiring owner/operators to perform routine inspections of all BMP's at nually? (4.2.5.7.a.) But DEA. 6.5 NOT PER NEW RMP		
98.	Y sto	N rmw	Are they requiring owner/operators to perform comprehensive inspections of all ater management facilities at least every five years? (4.2.5.7.b.)		
99.	Y (4.2	N 2.5.7.	Are these inspections (1/5yrs) being performed by an engineer or landscape architect? b.)  Now BM		
100.	Do	the i	nspection reports include the following information (4.2.5.7.b.):		
	Υ	N	Facility type		
	Υ	N	Inspection date		
	Υ	N	BMP owner information    UNDER   DEVELOPMENT		
	Υ	N	Description of BMP condition		
	Υ	N	Photos		
	Υ	N	Maintenance items or violations needing correction		
101.	Υ	N	Are they requiring a copy of these inspections to be submitted?		
Minii Muni	mun icipa	n Co al Op	ntrol Measure #6: Pollution Prevention/Good Housekeeping for Scherage Trucks, Salt w/TARR Derations (4.2.6)  BACKNOSS, TRACKHOES, DUM A TRUCKS		
102.	Υ	N	Has this program element been included in the SWMP? (4.1.)		
103.		N Have they identified the municipal activities that are exposed to stormwater? List the ivity and/or facility. (i.e., park, open space maintenance, fleet and building maintenance, astruction/land disturbances, and stormwater system maintenance).			
104.	Y	N	Is there a designated stormwater person identified for each activity/facility?		
105.			Have they developed and implemented an operation and maintenance program that a training component and has the ultimate goal of preventing or reducing pollutant rom municipal operations? (4.2.6.)		
106.	Y mai	N inten	Is there stormwater BMP technical guidance designated and made available for ance staff?		
107.	Wh	at ty	pes of training have been received? TRAIDING SESSION - ANNUALLY		

108.	How many of the staff have received training? (List by facility)
109.	Y N Do they use contractual staff to complete MS4 maintenance activities?
	If yes, who?
110.	Y N Is there a schedule established for inspection and cleaning of catch basins and the stormwater conveyance system? What is the schedule?
111.	What is the frequency of inspection? (Proactive/Response to emergencies)
112.	Y N Are procedures in place for properly disposing of waste removed from the separate storm sewers? (4.2.6.) MOST ITEMS ARE HAULED TO LANGEIL
113.	How is the MS4 spoil disposed of? Is it tracked and recorded? Ask to see documentation.
114.	How often does street sweeping occur? DAILY - CONTRACTED (SWEEPING COOP. OF AMERICA  How are the street sweeping spoils disposed?  + IN HOUSE  SCA
115.	How are the street sweeping spoils disposed?
116.	Y N Is there a written Integrated Pest Management (IPM) program for municipal operations? If yes, who is assigned to coordinate the IPM program?
117.	How does the SWMP address/inspect road salt storage? IT WILL
118.	Y N Are storage locations identified for chemicals?
119.	Y N Are there procedures for chemical (i.e., deicer, brine, etc.) applications?
120.	Y N Do maintenance contracts include language on stormwater impact and appropriate BMPs? STEER SWEEDER
121.	Y N Are procedures in place to ensure that new flood management projects assess the impacts on water quality? [Have they coordinated with flood control managers for the purpose of identifying and addressing environmental impacts?] (4.2.6.) THROUGH PLANS REVIEW PARES
122.	N Are procedures in place to examine existing projects for incorporating additional water quality protection devices or practices at municipal facilities? (4.2.6.)
	N Are procedures in place to examine existing projects for incorporating additional water quality protection devices or practices at municipal facilities? (4.2.6.)  ON - GOING INSAECTIONS  > NEW PRAINTE PROJECT S. MITIN  FROM  BOO'N È S. DIF  FRIENDSHIP ROAD

123. Y N Have the following been considered when developing their program: "maintenance activities, maintenance schedules, long-term inspection procedures of structural and non-structural controls, controls for reducing or eliminating discharges from streets, roads, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops, salt/sand storage locations, and waste transfer stations" (4.2.6.)

#### Reviewing and Updating Stormwater Management Program (4.4)

- 124. Y N Are they performing an annual review of the Stormwater Management Program during preparation of the annual report? (4.4.1) List how this is done?
- 125. Y N Are changes to the Stormwater Management Program being reported to the division? (4.4.2) If yes, how are the changes reported?
- 126. Y N Have any new areas been added to the MS4 within the last 12 months?
- 127. Y N Do they have a plan for implementing the Stormwater Management Program in all newly added areas within 90 days of transfer of responsibility? (4.4.4.)
- 128. Y N Does the plan include schedules for implementation? (4.4.4.)
- 129. Y N Are they implementing their Stormwater Management Program requirements in these areas? (4.4.4.)
- 130. Y N Has information on all new annexed areas and resulting updates been included in the annual report? (4.4.4.)

#### **Enforcement Response Plan (4.5)**

131. Y N Have they developed an Enforcement Response Plan addressing their ability to respond to violations and describing progressive enforcement including verbal warnings, written notices, citation with penalties, stop work orders, and withholding of plan approvals or other authorizations? (4.5.1.) (Due 18 months from NOC effective date)

ORD. 6.5

DR.D. 6.5

132. Does their enforcement case documentation include the following (4.5.3.):

Y N Name of owner/operator

Y N Location

Y N Description of violation

Y N Compliance schedule

Y N Enforcement response used

Y N Documentation of enforcement response

Y N Referrals

Y N Date the violation was resolved

133. Y N Have they developed a plan to identify chronic violators? Describe. (4.5.4.)

13

#### **Discharges to Water Quality Impaired Waters**

- 134. Y N Have they included/implemented BMPs specifically targeted to achieve wasteload allocations prescribed by all applicable TMDLs? (3.1.1)
- 135. Y N Does the SWMP include a schedule of installation and monitoring of such BMPs? (3.1.1.)

#### **Analytical monitoring (5.1)**

- 136. Y N Has this program element been included in the SWMP? (3.1.1.)
- 137. Y N For stream segments identified as being impaired for siltation and/or habitat alteration, where discharges form the MS4 have been identified as a source of impairment, is biological stream sampling utilizing the Semi-Quantitative Single Habitat (SQSH) Method as identified in the division's Quality System Standard Operating Procedure for Macroinvertebrate Stream Survey being performed? (5.1.)
  - Y N Every 5 years?
- 138. Y N For stream segments identified as being impaired for pathogens, where discharges from the MS4 have been identified as a source of impairment, is bacteriological stream sampling utilizing methods identified in the division's <u>Quality System Standard Operating</u>

  Procedure for Chemical and Bacteriological Sampling of Surface Water being performed? (5.1.)
  - Y N Every 5 years? Annually
- 139. Y N Are they performing the TMDL prescribed analytical monitoring for all stream segments subject to a TMDL for parameters other than siltation, habitat alteration or pathogens where the MS4 has been identified as a source of impairment? (5.1.)

PLANNING FOR THIS YEAR

#### Non-analytical monitoring (5.2)

- 140. Y N Has this program element been included in the SWMP? (3.1.1.)
- 141. Y N Are they performing visual stream surveys and impairment inventories upstream and downstream of each MS4 outfall discharging into an impaired stream where the discharges from the MS4 have been identified as a source of impairment? (5.2.) Ask to see their records. Describe how this is documented.
  - Y N Every 5 years?

#### Recordkeeping (5.3)

142. Y N Are records being kept of all monitoring activities, copies of reports, and records of all data used to complete the NOI for at least 3 years? (5.3.)

#### Reporting (5.4)

143. Y N Have they presented their annual reports at a public hearing for suggestions and comment prior to submitting to the division? (5.4.) List how they documented.

WEBSITE - APP DGOV

144. Y N Have they submitted their annual reports to the EFO by September 30<sup>th</sup> of each year that covers the previous fiscal year? (5.4.)

Wrap-Up:

145. Does the SWMP include the follow information for each of the six minimum control measures:

Best management practices (BMPs), programs and processes (SOPs) that the MS4 will implement for this minimum control measure? (4.1.a.)

- Y N Public Education and Outreach
- Y N Public Involvement/Participation
- Y N Illicit Discharge and Elimination
- Y N Construction Site Stormwater Runoff Control
- Y N Permanent Stormwater Management
- Y N Pollution Prevention/Good Housekeeping for Municipal Operations

Measurable goals and milestones that the MS4 will implement (with dates/frequencies) for each BMP? (4.1.b.)

- Y N Public Education and Outreach
- Y N Public Involvement/Participation
- Y N Illicit Discharge and Elimination
- Y N Construction Site Stormwater Runoff Control
- Y N Permanent Stormwater Management
- Y N Pollution Prevention/Good Housekeeping for Municipal Operations
- Y N The person(s) responsible for implementing/coordinating BMPs?

The person(s) responsible for implementing or coordinating the BMP? (4.1.c.)

- Y N Public Education and Outreach
- Y N Public Involvement/Participation
- Y N Illicit Discharge and Elimination
- Y N Construction Site Stormwater Runoff Control
- Y N Permanent Stormwater Management
- Y N Pollution Prevention/Good Housekeeping for Municipal Operations

Pollutant control efforts for all municipal operated facilities that maintain or store motorized equipment, oils, or other hazardous materials? (4.1.d.)

- Y N Public Education and Outreach
- Y N Public Involvement/Participation
- Y N Illicit Discharge and Elimination
- Y N Construction Site Stormwater Runoff Control

	Υ	N Pu	blic Education and Outre	ach
	Υ	N Pu	blic Involvement/Particip	pation
	Υ	N Illio	cit Discharge and Elimina	tion
	Υ	N Co	nstruction Site Stormwat	er Runoff Control
	Υ	N Per	rmanent Stormwater Ma	nagement
	Υ	N Po	llution Prevention/Good	Housekeeping for Municipal Operations
146.	Y N the MS <sup>2</sup>			plementation among various agencies or units within for SWMP implementation? Describe.
Additi	onal Com	ments:		
				<del>_</del>
-				
#				
				TE-THE TOTAL TERMINATION OF THE TOTAL TERMINAT
	e/Agency Inspecto	of :	AMES W. Scott TDEC. DWR	Signature of Lead Inspector:
	es/Agenc r Inspecto	es of		
* This w	orksheet a	pplies to M	S4s that have been previously	permitted.

**Permanent Stormwater Management** 

Pollution Prevention/Good Housekeeping for Municipal Operations

Are all applicable inspections and monitoring programs described in detail? (4.1.e.)

Υ

Υ

Ν

Ν